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Applicants' respectfully submit the foregoing Restriction Requirement is improper. Applicants' traverse the Restriction Requirement to the extent that Groups I and II should be reformed as a single group containing Claims 1-44. Applicants' grounds for traverse are set forth below.

Contrary to the Examiner's position, the simulation of the claims in Groups I and II are capable of being used together and have the same mode of operation, function and effect, e.g., modeling components. Specifically, the starting points of each group are the same, e.g., constructing a model and, in further like fashion, generating dynamic behavior of the model. Furthermore, both groups include the same components of a modeling component and a simulation engine. In addition, as Groups I and II are of the same class, a literature search for Groups I and II would be nearly, if not completely, co-extensive. Accordingly, Applicants respectfully submit that a sufficient search and examination with respect to the simulation of a biological system and the simulation of chemical reactions can be made without a serious burden on the Examiner. As the MPEP states: if the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinctive inventions. *See*, MPEP 803.

Accordingly, Applicants respectfully request the Examiner to withdraw the Restriction Requirement and join the claims of Groups I and II as a single group.

**RESPONSE TO ELECTION OF SPECIES**

In the Office Action the Examiner requests a species election as applied to claim Groups I and II.

The Examiner has also requested election of a single species with regard to selection of a computational model from a group of analysis techniques.

The species identified are:

Species A: one first computational model among those recited, for example, in claims 5, 13, 20, 27, 35, and 42.

Species B: one second computational model among those recited, for example, in claims 6-7, 14, 21, 28-29, 36, and 43.

Applicants traverse the election requirement to the extent searching does not require a distinct strategy because the searches for the species would be co-extensive. Contrary to the Examiner's position, the various species mechanisms by which a result of the dynamic behavior of the constructed computational model is generated are capable of use together and a literature search of all species would be nearly, if not completely, co-extensive. For example, independent claims 1, 9, 16, 23, 31, and 38 explicitly recite a first type of computational model and a second type of computational model. Dependent claims 5, 13, 20, 27, 35, and 42 of Species A and dependent claims 6-7, 14, 21, 28-29, 36, and 43 of Species B merely further limit each respective independent claims by further defining the first and second type of computational model used in the respective independent claim.

Moreover, the dependent claims of Species A and the dependent claims of Species B recite the same computational models. Clearly a search for the computational models identified in Species A would include the computation models identified in Species B. Thus, search and examination of all of the dependent claims in Species A and Species B can be made without serious burden on the Examiner.

Accordingly, Applicants respectfully submit that a sufficient search and examination with respect to the claimed species can be made without serious burden on the Examiner.

However, in order to be considered responsive to the instant Office Action, Applicants hereby elect using a first computational model. Claims 5, 13, 20, 27, 35, and 42 read on the elected species.

It is Applicants understanding that examination will proceed on the elected species and the entire scope of the invention encompassing the elected species. That is, upon allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable claim as provided by 37

CFR 1.141. Furthermore, Applicants reserve the right to file divisional applications on the remaining subject matter, if so desired.

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**CONCLUSION**

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. MWS-110 from which the undersigned is authorized to draw. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

In view of the above comments, Applicants believe the pending application is in condition for allowance and urge the Examiner to pass the claims to allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 227-7400.

Dated: February 20, 2007

Respectfully submitted,

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